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PUBLIC UTILITIES
COMMISSION

June 30, 2014

The Honorable Chair and Members of the
Hawaii Public Utilities Commission
465 South King Street
Kekuanaoa Building, Room 103
Honolulu, HI 96813

Re: Docket No. 2007-0008 – In the Matter of Public Utilities
Commission Instituting a Proceeding to Examine Hawaii's
Renewable Portfolio Standards Law, Hawaii Revised Statutes
("HRS") §§ 269-91 – 269-95, as Amended by Act 162, Session
Laws of Hawaii 2006: Kauai Island Utility Cooperative's ("KIUC's")
2013 Annual Renewable Portfolio Standards ("RPS") Status Report

Dear Commissioners and Commission Staff:

Please find enclosed KIUC's Annual RPS Status Report for the year ending
December 31, 2013 ("2013 RPS Report").

As shown in the attached 2013 RPS Report, renewable energy resources and
energy savings supplied 18.96% of KIUC's net electricity sales during the 2013 calendar
year. This exceeds the year 2010 RPS goal of 10.0% to be achieved by each electric
utility as established by HRS § 269-92(a)(1), as amended.

The attached 2013 RPS Report also includes a breakdown of the renewable
energy resources on Kauai comprising the 18.96% RPS for 2013 and the RPS reached
in 2005, 2006, 2007, 2008, 2009, 2010, 2011 and 2012. Also included in said report is
a discussion of KIUC's commitment to continue to increase the growth of renewable
energy and energy savings on Kauai.

The power of human connections.

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We thank you for your consideration of this matter. If you should have any questions concerning this report, please call me at (808) 246-8208.

Very truly yours,

A handwritten signature in black ink, appearing to read "Michael V. Yamane", with a long horizontal flourish extending to the right.

Michael V. Yamane, P.E.
Chief of Operations

Enclosure

cc: Kent Morihara
Consumer Advocate (3)
Mr. Joseph Viola
Mr. Dean Matsuura
Mr. Jay Ignacio
Ms. Sharon Suzuki
Thomas W. Williams, Jr., Esq.
Craig I. Nakanishi, Esq.
Mr. David Bissell
Mr. Timothy Blume
Mr. Warren S. Bollmeier, II
Mr. Henry Q. Curtis

Kauai Island Utility Cooperative Renewable Portfolio Standards (RPS) Status Report Year Ending December 31, 2013

KIUC RPS Results for 2013

Kauai Island Utility Cooperative (KIUC or Company) achieved a Renewable Portfolio Standard (RPS) percentage of 18.96% for calendar year 2013. This exceeds the State of Hawaii's 2010 RPS requirement of meeting 10% of KIUC's net electricity sales with electrical energy generated and/or displaced by renewable resources.¹ In addition to meeting the 2010 required RPS percentage of net electricity sales, KIUC has also met the requirement that at least 50% of its RPS be met by electrical energy generated using renewable energy as the source.²

KIUC met the electrical energy needs of its customers with a combination of Company-owned fossil fueled generation, Company-owned renewable generation, and non-firm (100% renewable) power purchases³. In addition to this generated electricity, Photovoltaic (PV) systems and Demand Side Management (DSM) measures, including Solar Water Heating (SWH), also supplied some of KIUC consumers' energy needs, while at the same time, displacing fossil-fuel generated power. The portion of the RPS met by electrical energy generated using renewable energy as the source was 47,674 megawatt-hours, which is greater than 50% of the total 2013 10% RPS requirement of 43,148 megawatt-hours (MWh).⁴ Exhibit A, attached hereto, illustrates how KIUC met the energy needs of its approximately 36,000 accounts.

In 2013, KIUC achieved an RPS percentage of 18.96%, which is 2.32% more than KIUC's 2012 RPS percentage of 16.64%. This is due to the following:

1. A full year of solar production from McBryde Solar, which began operation in December 2012.
2. Significant addition of customer-sited photovoltaic systems.
3. Continued success integrating DSM technologies.

¹ Hawaii Revised Statutes (HRS) § 269-92(a)(1).

² HRS § 269-92(b).

³ KIUC has nine non-firm power purchase contracts to purchase excess electrical power from Gay & Robinson (G&R) (hydro), Kauai Coffee (hydro), Kekaha Agriculture Association (KAA) (hydro), Green Energy Team (hydro), Green Energy Team (biomass), Pioneer (solar), Kapaa Solar (solar), McBryde Resources (solar), and MP2 Kaneshiro (solar). G&R shutdown its sugar operation in 2009 and as such has not generated any biomass-fueled energy since then.

⁴ 43,148 MWh is 10% of KIUC's annual sales of 431,478 MWh.

KIUC Future RPS Activities

While KIUC exceeded the 2010 RPS goal of 10%, the Company is committed to even further increasing the growth of renewable energy and energy savings. To accomplish this, KIUC is undertaking the following:

1. On September 29, 2011 the Commission approved KIUC's expenditures for the Smart Grid Project. KIUC completed the installation portion of the project in 2013.
2. On January 25, 2011, KIUC signed a PPA for the purchase of electricity generated from the 6.7 MW Green Energy Biomass-To-Energy facility. The Commission approved the PPA on October 31, 2011. The project began construction in early 2013 and is expected to begin operation in December 2014. This facility will provide approximately 10-12% of KIUC's current annual energy requirements.
3. On November 29, 2012, the Commission approved KIUC's application to develop a 12 MW PV facility to be located in Anahola. KIUC began construction of this facility in June 2014, and expects to begin operation in mid-2015. This facility will provide approximately 5-6% of KIUC's current annual energy requirements.
4. On June 19, 2013, the Commission approved KIUC's application to develop a second 12 MW PV facility, to be located in Koloa. KIUC began construction of this facility in November 2013, and expects to begin operation in July 2014. This facility will provide approximately 5-6% of KIUC's current annual energy requirements.
5. KIUC continues to investigate island-wide hydroelectric projects that, if successful, could provide greater than 20% of the island's annual electricity requirements. At this time, it is KIUC's intention to finance and own hydroelectric facilities, as such structure will facilitate the lowest possible generation cost to the people of Kauai.
6. KIUC continues its efforts in securing a long-term water lease from the Department of Land and Natural Resources for the Waiahi hydro-electric facilities.
7. In September 2013 KIUC issued a Fuel Supply Request for Information (RFI) to evaluate conventional and alternative fuel supplies that may provide cost savings and/or increase renewable generation. KIUC continues to evaluate the responses.
8. In March 2014 KIUC issued an Energy Storage / Dispatchable Renewable Energy Request for Proposals (RFP) that may provide solutions to allow

higher levels of solar penetration while offsetting night-time oil-fired generation. KIUC reviewed 45 bids and found that there was not an obvious member benefit to any of them. KIUC may decide to issue another similar RFP in the future to see if the market has evolved. KIUC is also investigating the possibility of financing and owning a pumped-hydro storage facility, as such a facility will provide the lowest possible storage cost to the people of Kauai.

9. In addition to large utility-scale renewable energy projects, KIUC also recognizes the importance of small-scale PV, SWH, and DSM systems in meeting future RPS goals. To this end, KIUC is also continuing its residential energy efficiency programs, commercial retrofit program, and its SWH programs.

Conclusion

KIUC achieved an RPS percentage of 18.96% in 2013, which currently surpasses the 10% by 2010 RPS requirement by 8.96%. With the future activities identified above, KIUC is on target to meet the 2015 RPS requirement of 15%. KIUC recognizes the benefits that renewable energy and energy savings provide to the visitors, residents, and commercial sectors of Kauai, as well as the positive impacts on global environmental, societal, and economic issues. As such, KIUC will continue to evaluate, promote, and incorporate renewable energy and energy savings to meet the needs of its members, the Kauai community, and the State.

KIUC RPS Status Report

Exhibit A

	2005	2006	2007	2008	2009	2010	2011	2012	2013
	MWh	MWh	MWh	MWh	MWh	MWh	MWh	MWh	MWh
1. Net Fossil Generation	413,355	419,451	441,154	417,986	399,325	400,307	392,689	389,180	376,778
2. Net Renewable Generation / Electrical Energy Generated Using Renewable Energy As Source ¹									
KIUC Hydro	4,232	4,561	926	7,968	7,454	7,896	6,974	7,591	8,063
Gay & Robinson Hydro	3,501	3,921	2,845	2,385	3,574	3,450	4,871	4,142	3,355
Kauai Coffee Hydro	26,292	25,613	20,612	22,149	21,756	18,296	21,208	23,038	18,501
KAA Hydro	3,466	3,024	2,079	3,106	4,141	4,374	5,457	3,775	3,154
Green Energy Hydro					5	189	407	366	278
Pioneer Solar							21	23	22
Kapaa Solar							1,468	1,858	1,827
MP2 Kaneshiro Solar									530
McBryde Solar									11,945
Total	37,491	37,120	26,462	35,607	36,930	34,205	40,407	40,793	47,674

3. Electrical Energy Savings²

From Renewable Displacement or Off-Set Technologies³

Customer Renewable Generation (own use)

From Use of Energy Efficiency Technologies⁴

Demand Side Management (DSM)

Total

4. Total Sales / Total Electrical Energy Sales / Net Electricity Sales⁵

5. Total Renewable Electrical Energy (Item 2 Total + Item 3 Total)

Total / RPS Percentage (Item 5 / Item 4)

Percent of Net Electricity Sales supplied by Item 2 Above

Percent of Net Electricity Sales supplied by Item 3 Above

¹ Renewable electrical energy generated via power purchase agreements with independent power producers is based on recorded data of the energy generated from the power producer facility, which is typically the net electricity energy sold to the utility. Pursuant to the definition of "renewable electrical energy" under HRS Section 269-91, this will not include customer-sited, grid-connected renewable energy generation (i.e., net energy metering, Schedule Q) until January 1, 2015.

² Pursuant to HRS Section 269-92(b)(2), beginning January 1, 2015, electrical energy savings shall not count toward the RPS.

³ Pursuant to HRS Section 269-91, under the definition of "Renewable electrical energy," these types of technologies include solar water heating, sea water air-conditioning district cooling systems, solar air-conditioning, and customer-sited, grid-connected renewable energy systems. Beginning January 1, 2015, this shall not include electrical energy savings brought about by customer-sited, grid-connected renewable energy systems.

Pursuant to Section III A.3 of the RPS Framework, "Electrical energy savings brought about by the use of renewable displacement or off-set technologies shall be determined using actual recorded energy produced by the displacement or off-set technologies, if that information is available to the utility, and the corresponding estimated electrical savings. Where the recorded energy produced by the displacement or off-set technologies is not available to the utility, as in the case of customer-sited renewable energy systems, the utility may make reasonable estimates of the energy produced by such systems, and provide an explanation of the calculation of the estimates. The electrical energy savings shall be expressed at a comparable level to the electrical energy generated using renewable energy sources (i.e., at the net generation level)."

⁴ Pursuant to HRS Section 269-91, under the definition of "Renewable electrical energy," energy efficiency technologies include heat pump water heating, ice storage, ratepayer-funded energy efficiency programs, and use of rejected heat from co-generation and combined heat and power systems, excluding fossil-fueled qualifying facilities that sell electricity to electric utility companies and central station power projects.

Pursuant to Section III A.4 of the RPS Framework, "Electrical energy savings brought about by the use of energy efficiency technologies shall be determined using the actual gross energy savings (i.e., gross of (including) free-riders) reported by the utility or third-party DSM administrator in its annual DSM program report to the Commission excluding any electrical energy savings brought about by the use of (renewable displacement or off-set technologies). The electrical energy savings shall be expressed at a comparable level to the electrical energy generated using renewable energy sources (i.e., at the net generation level)."

⁵ Pursuant to Section I of the RPS Framework "total electrical energy sales" or "net electricity sales" means the total MWhs of electrical energy sold by a utility to its customers during a given year. KIUC notes that Item 1 (Net Fossil Generation) plus Item 2 (Net Renewable Generation) does not equal Item 4 (Net Electricity Sales). This is because currently and until January 1, 2015, and as required by HRS § 269-91, Item 2 (Net Renewable Generation) does not include customer-sited, grid-connected renewable energy generation (e.g., energy generated and exported to KIUC by NEM, NEM Pilot, and Schedule Q customers). However, KIUC's sales of such customer-sited, grid-connected renewable energy generation are included in Item 4 (Net Electricity Sales).